FORECAST SYSTEMS LABORATORY
Boulder, Colorado

Mission

 The mission of the Forecast Systems Laboratory (FSL) is to transfer scientific and technological developments in atmospheric and oceanic research to the Nation's operational services. It conducts programs to integrate, and apply developments to, observing, information and forecast systems. These programs are important in helping NOAA meet its objectives to improve its ability to observe, understand, and model the environment and effectively disseminate its products and services to various users. The following are FSL's essential functions:

- *Exploratory system development.* Developing and validating information systems to satisfy NOAA's operational services.

- *Research applications.* Utilizing advances in understanding atmospheric and oceanic processes to develop improved data management systems, forecasting systems, and analysis systems for geophysical data.

- *System validation.* Testing systems in realistic environments to assess their usefulness in improvement of NOAA's services.

- *Technology transfer.* Facilitating transfer of new techniques and systems to operational status, working directly with users.

Brief History

FSL was formed in 1988. It developed from three Environmental Research program areas: the Program for Regional Observing and Forecasting Services (PROFS), the Profiler Technology Transfer Group (PTTG), and the Weather Research Program (WRP). These programs along with several other major activities make up the nucleus of FSL today.

Financial Profile   (Dollars in Thousands)

Fiscal Year	Permanent Funding	Other NOAA	Non-NOAA	Pass Through	TOTAL
FY 2001	8338.5	12654.6	5225.1	0	26218.2
FY 2002	9134.1	11056.1	8092.7	0	28282.9
FY 2003	9129	11842.6	7101.4	0	28073

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Personnel Data

FY	FEDERAL EMPLOYEES	JOINT INSTITUTE	Contractors	TOTAL
FY 2000	90	66	43	199*
FY 2001	86	67	42	195**
FY 2002	91	71	51	213***
FY 2003	90	56	57	203****

     * In 2000 FSL had 15 NWS/Guest workers.

     ** In 2001FSL had 18 NWS/Guest workers.

     *** In 2002 FSL had 16 NWS/EPA and foreign visiting scientists

         (In 2002) FSL had 2 students under Federal Staff total

     **** In 2003 FSL has 2 students under Federal Staff total

Average Age Federal/Scientific/Engineering and Technical Staff	50
Average Age of JI/Scientific/Engineering and Technical Staff	44

Federal Staff	PhD	29%	MS	30%
JI Staff	PhD	27%	MS	39%

FORECAST SYSTEMS LABORATORY
PARTNERSHIPS

PARTNERSHIPS	IDENTIFY (and explain)
JOINT INSTITUTES	CIRA/CSU, CIRES/CU Collaborative research projects in support of NOAA strategic plan goals
PARTNERSHIPS WITH OTHER LABS	AL,AOML,ETL,GFDL,NSSL, PMEL Collaborative research projects supporting NOAA mission goals to address national needs; 8 of 12 OAR Labs are using FSL's supercomputer for scientific research applications

OTHER OAR PROGRAMS	USWRP, IHOP, NCEP/JCSDA Basic and applied research, and technology transfer supporting the operations of NOAA and OAR mission goals
OTHER NOAA RELATIONSHIPS	NESDIS, NWS(NCEP,OST) Basic and applied research including field studies, and technology transfer supporting the operations of other NOAA line offices; new system tests involving NWS forecasters
OTHER FEDERAL AGENCIES	NASA, DOA(USFS,WAOB), DOD (USA,USAF), DOE(GFO,NREL), DOI/BLM, DOT/FAA, USGS Collaborative research projects in support of NOAA Strategic Plan
STATE AGENCIES	None
LOCAL PARTNERSHIPS	National Center for Atmospheric Research, and Cooperative Observational Meteorological Education Training Program (COMET)
UNIVERSITY PARTNERSHIPS	Iowa State University, University of Northern Iowa, University of New Hampshire, and University of Oklahoma
INTERNATIONAL	Transfer technology to Taiwan Central Weather Bureau (CWB) and Korean Meteorological Research Institute of the Korean Meteorological Administration (KMA), and Hong Kong Observatory (HKO) specialized Local Analysis and Prediction System (LAPS) training